

Independence and Interdependence of a Professional Development School Partnership

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Abstract

Professional Development School Partnerships have the potential to provide unique experiences for teacher candidates and also provide important professional development for the K-12 school personnel involved in the relationship. According to the National Association of Professional Development Schools (2008), a key essential to a successful partnership involves the entities' ability to achieve objectives together that neither partner might be able to fully accomplish individually. Our Professional Development School is a model for how the partners' joint mission operates beyond each institution's ability to provide the experiences and services in isolation. Although both the school district and the university are independent entities, their interdependence in the Professional Development School allows us to accomplish the overarching mission to improve education at all levels in our community from six weeks old to the doctoral level. The benefits are initiatives such as a joint Montessori Academy for children, participation on advisory councils, and a grade seven through twelve Early College program. Classrooms are made available for university faculty to do research, preservice teacher candidates can observe and practice, and first-generation at-risk students have the support they need for college placement. Professional development offerings by university faculty and District staff in areas such as Positive Behavior Interventions and Supports allow District teachers a unique professional development experience and the ability to continue and achieve a university certificate for their participation.

Keywords: professional development school, positive behavior interventions and supports, independence, interdependence

Over 30 years ago, the Holmes Group introduced the concept of Professional Development School (PDS) relationships as “working partnerships among university faculty, practicing teachers, and administrators that are designed around the systematic improvement of practice” (1986, pp. 66-67). They likened them to teaching hospitals, where research and practice exchanges occur that benefit both entities. Since that time, PDS relationships have grown from a “concept to a vibrant and important reality;” “a cornerstone of serious attempts to simultaneously improve teacher education and public schools” (Teitel, 2004, p. 1). Today the National Association for Professional Development Schools (n.d.; 2019) supports an annual conference and the *School-University Partnerships* journal. In this publication, the authors highlight the importance of the interdependence of the relationship while still maintaining University and District independence. Various examples, such as instituting a Positive Behavior Interventions and Supports (PBIS) program, a Montessori Academy, an Early College Program for middle and high school students, and multiple joint grants, illustrate examples of the independent and interdependent relationship.

The purpose of the present study was to examine the various aspects of the PDS partnership between a University and its neighboring PreK-12 school district in light of its independent and interdependent relationship utilizing a mixed methods design. The study is relevant to those studying or planning to implement similar partnerships in that it illustrates successes and challenges within the PDS model. Following a review of relevant literature, the researchers present an outline of the methodology that guided the study, results, and a discussion of the, the study’s limitations, and suggestions for further research. Four categories, including (1) adhering to essentials guiding the partnership, (2) reading and mathematics literacy support, (3) developing and supporting joint programs, and (4) positive behavior interventions and supports are explored as they relate to the independent and interdependent relationship and student and district success.

Establishing the Relationship

The PDS partnership was developed in 2015 between a state university and a county-wide charter school district in central Georgia. It was shortly after the District’s superintendent and the College of Education’s dean were hired. Both had previous experiences with PDS partnerships in other settings. After initial exploratory discussions and guidance from external PDS consultants, the University and District developed a memorandum of understanding (MOU) and assigned a liaison from each entity to coordinate monthly PDS meetings to guide and coordinate the partnership’s many activities. The liaison role was seen as essential to the partnership (Parker, Parsons, Groth, & Brown, 2016).

Because literacy was an initial priority, a literacy faculty member represented the College of Education (COE), spending a day each week in the District. As the partnership progressed, a second faculty member with PBIS experience was also assigned to the District. In addition to the monthly PDS meetings, the COE Dean, Georgia College & State University (GCSU) President and Provost, and the District Superintendent met on an annual basis to review the partnership and look at potential opportunities that fit within the guiding essentials of a PDS relationship.

Literature Review

Professional Development Schools originated with the goal of creating school-university partnerships for educational change through enhanced professional development (Darling-Hammond, 1994, 1998; Goodlad, 1990; Holmes Group, 1986, 1990; Levine, 1992, 1998).

Professional development is enhanced when there is a supporting environment (Chang, Chen, & Chou, 2017; Tracz, Beare, & Torgerson, 2018). These partnerships are designed to promote professional development of both the novice and veteran teacher (Carpenter & Sherretz, 2012; Darling-Hammond, 1994; Ismat, 1999; Nzairwehi & Atuhumuze, 2019). The latter is often overlooked however, and there can often be a lack of parity (Al Seyabil, 2017; Breault, 2014). Oftentimes the impetus for the relationship is that colleges need places to place preservice teachers (Walsh & Backe, 2013). One goal of our partnership and supporting research was to challenge the notion that these relationships are limited to just professional development and a place to assign preservice teachers.

As the American Association of Colleges for Teacher Education (AACTE) points out “[a]nother important teaching function of colleges of education is providing continuing professional education for teachers, school administrators, and other education professionals” (2018a, p. 37). Darling-Hammond (1998) emphasizes the duality of the relationship by stressing that a professional teacher continues to learn from teaching.

These new programs typically engage prospective teachers in studying research and conducting their own inquiries through cases, action research, and structured reflections about practice. They envision the professional teacher as one who learns from teaching rather than as one who has finished learning how to teach, and the job of teacher education as developing the capacity to inquire systematically and sensitively into the nature of learning and the effects of teaching (Darling-Hammond, 1998, p. 9).

PDS provides a role for teacher educators to assist both novices and experts with the important end goal of promoting student achievement, an often-overlooked area of the partnership (Abdal-Haqq, 1999; Darling-Hammond, 1998; Darling-Hammond, Ramos-Beban, Altamirano, & Hyler, 1998; Murrell, 1998; Renyi, 1996). According to the National Association for Professional Development Schools (NAPDS) vision, there needs to be “equal representation of, and access for, all educators invested in improving education” (2008a). One primary goal of our partnership and supporting research was to challenge the notion that these relationships are limited and simply facilitate things that occur without a PDS relationship.

Professional development work in the schools also promotes Boyer’s concept of the scholarship of engagement as faculty share their expertise in the schools (Andrews & Leonard, 2018; Boyer, 1996). This can be challenging at times since successful partnerships involve collaborative relationships that support school-wide approaches with every teacher involved (Colwell, MacIsaac, Tichenor, Heins, & Piechura, 2014; Parsons & Renyi, 1999). Additionally, there can also be challenges to the role the teacher educator plays in the school, how the hierarchy is established, and when there are organizational changes (Ronen, 2018; Schack, 2011). One area for our partnership was classroom management through positive behavioral approaches.

Early College Program

In Georgia, Early College is a partnership between the Georgia Department of Education and the University System of Georgia. Public schools partner with public colleges and universities to offer high school courses and dual enrollment opportunities. According to the Board of Regents of the University System of Georgia (2017, para. 2), “[e]arly College is an intervention strategy for students who may not be well served by traditional high schools. The initiative also

seeks to change the face of higher education by targeting those students traditionally underrepresented on college campuses.”

Montessori Academy

Montessori education was developed by Maria Montessori, an Italian physician. It dates back more than 100 years. It is characterized by “children working independently and in groups, often with specially designed learning materials; deeply engaged in their work; and respectful of themselves and their surroundings” (American Montessori Society, n. d., para. 2). Another distinguishing feature is that “children are provided freedom to explore subjects in blended classrooms where older students solidify their own knowledge by helping the younger students learn” (Montessori Academy at the Early Learning Center, n. d., para. 1).

Positive Behavioral Interventions and Supports

School-wide Positive Behavioral Interventions and Supports (SW-PBIS) is “a systems approach to establishing the social culture and behavioral supports needed for all children in a school to achieve both social and academic success” (Horner, Sugai, & Lewis, 2015, p. 1). SW-PBIS initially involves a leadership team where behavior specialists, administrators, regular teachers, and special needs teachers attend training sessions on PBIS, establish schoolwide goals, and begin an implementation plan (Netzel & Eber, 2003). This is followed by school-wide implementation, where the team provides ongoing professional development for the building staff, analyzes the behavioral policies already in place, adjusts as needed, and begins documenting outcomes with a research-based approach (Cressey, Whitcomb, McGilvray-Rivet, Morrison, & Shander-Reynolds, 2018; Hirsch et al., 2019; Horner et al., 2014; Horner, Sugai, & Lewis, 2015; Netzel & Eber, 2003; Sugai & Horner, 2009). The core elements of PBIS are shown in Table 1.

Table 1: Core elements at each of the three tiers in the PBIS prevention model

Prevention Tier	Core Elements
Primary	Behavioral Expectations Defined Behavioral Expectations Taught Reward system for appropriate behavior Clearly defined consequences for problem behavior Differentiated instruction for behavior Continuous collection and use of data for decision-making Universal screening for behavior support
Secondary	Progress monitoring for at risk students System for increasing structure and predictability System for increasing contingent adult feedback System for linking academic and behavioral performance System for increasing home/school communication Collection and use of data for decision-making Basic-level function-based support
Tertiary	Functional Behavioral Assessment (full, complex) Team-based comprehensive assessment Linking of academic and behavior supports Individualized intervention based on assessment information focusing on (a) prevention of problem contexts, (b) instruction on functionally equivalent skills, and instruction on desired performance skills, (c) strategies for placing problem behavior on extinction, (d) strategies for enhancing contingency reward of desired behavior, and (e) use of negative or safety consequences if needed. Collection and use of data for decision-making
Reference: Horner, Sugai, & Lewis, 2015, p. 2	

The National Association of Professional Development Schools Essentials

The National Association of Professional Development Schools (NAPDS) provided a policy statement titled “What It Means to Be a Professional Development School,” at its annual meeting April 12, 2008 (2008b). This statement, based on the work from a summit the prior year, delineated what it meant to have a PDS relationship by providing guidelines that were shown as the “nine essentials” (2008a). The purpose of this document was to specifically delineate what a professional development school relationship was and eliminate the “catch-all” models that were not true PDS relationships. In the document, they provided the nine required essentials of a PDS as:

1. A comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community;
 2. A school–university culture committed to the preparation of future educators that embraces their active engagement in the school community;
 3. Ongoing and reciprocal professional development for all participants guided by need;
 4. A shared commitment to innovative and reflective practice by all participants;
 5. Engagement in and public sharing of the results of deliberate investigations of practice by respective participants;
 6. An articulation agreement developed by the respective participants delineating the roles and responsibilities of all involved;
 7. A structure that allows all participants a forum for ongoing governance, reflection, and collaboration;
 8. Work by college/university faculty and P–12 faculty in formal roles across institutional settings; and
 9. Dedicated and shared resources and formal rewards and recognition structures.
- (2008b, pp. 2-3).

These essentials are all important to the proper functioning of a PDS relationship.

Evaluating the Success of a Professional Development School

When referring to the evaluation of the long-term professional development school relationship at the University of North Carolina at Wilmington and its partners, the authors note the lack of empirical studies on PDS models (Lewis & Walser, 2016). Bentley and Hendricks (2018) qualitatively discuss their collaborative experiences in promoting literacy, but do not provide the overall partnership specifics. Polly, Reinke, and Putnam (2019) explore their partnership in light of Goodlad’s postulates (Goodlad, 1994) and the AACTE clinical practice report (American Association of Colleges for Teacher Education [AACTE], 2018b). They address the nine essentials, but the article is essentially a synthesis of the NAPDS, AACTE, and Goodlad’s postulates.

Many studies discuss the PDS partnership from a university perspective, but often only focus on the field experiences for preservice teachers. Darling-Hammond (2010) cites positive experiences for teachers, but as M. Caparo, R. Caparo, and Helfeldt report, studies are “equivocal as the learning that occurs during field experiences” (2010, p. 132). This is due to the contextualization of programs involving specific partners. Darling-Hammond & Bransford (2005) have documented gains in student performance resulting from PDS initiatives (see pages 415–416). This study looks at the PDS relationship, support for the nine essentials, and the outcomes of a strong PDS.

Methodology and Methods

Participants

The partnership is with a county charter school system in rural Georgia. It is a Title I school district with four elementary schools, one middle school, and one high school. The student population is representative of the county's population. Over 80% of the students qualify for free or reduced-price meals and there is an approximate enrollment of 5,500 students. The racial makeup is 65% black, 28% white, 1% Asian, 2% Hispanic, and 4% multi-racial.

Research Design

Because of the various components of the PDS relationship, a mixed methods approach was used to study the various outcomes of the partnership. A variation of the explanatory design was used because the quantitative and qualitative data was collected in separate phases and later used to support the research questions (Creswell & Plano Clark, 2006). Johnson, Onwuegbuzie, and Turner (2007) describe mixed methods research as follows:

Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e. g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration (p. 123).

Table 2 shows the four main areas we used to examine the PDS partnership and why they were incorporated into the design.

Table 2: Areas of support

Four areas used to study the partnership and why they were chosen			
1. Adhering to essentials guiding the partnership	2. Reading and mathematics literacy support	3. Developing and supporting joint programs	4. Positive Behavior Interventions and Supports
Because this was an emerging partnership, both groups wanted to have a highly successful professional development school relationship, and because both entities had PDS relationships with other institutions with various levels of success, it was important to adhere to the to nine essentials as outlined by the National Association for Professional Development Schools. Since this would be difficult to explore in a quantitative way, a qualitative approach was taken.	One of the first partner activities was to provide literacy support. This is a key evaluative area for schools in Georgia (The College and Career Readiness Performance Index that ranks schools and includes literacy data as measured by the Georgia Milestones statewide exam). It is also an area that was initially determined as needing support. Positive results in this area would show that the PDS relationship was benefiting the schools and participating preservice teachers.	Two major ongoing programs are the Early College where grades 7-12 students attend regular and college classes on the university campus and a Montessori Academy for birth-kindergarten children of parents from the district and university have childcare in the district's early learning center. We were especially interested in looking at how the partnership would help facilitate problem solving when there were problems at either partnership site.	PBIS was the second major area of partner support after the literacy support. This area provided the ability for the district to become a "PBIS district" with the Georgia Department of Education, having a special education professor familiar with PBIS on site to provide professional development and also involve the special education preservice teachers was a win for both partners and a reason to look at if there was success in that area of the PDS partnership.

Table 3 illustrates the components of the design with the research methodology and questions.

Table 3: Research questions and methodology

Research Question	Research Method	Design References
Did the University and the District adhere to nine essentials as outlined by the National Association for Professional Development Schools?	Qualitative evaluation research (Denzin & Lincoln, 2011; Newman, 2011) conducted by internal evaluators looking at the nine required essentials by the National Association for Professional Development Schools (National Association for Professional Development Schools [NAPDS], 2008b) in comparison to the outcomes of the partnership. Interviews were the primary source of data when comparing the standards to the practices.	“The systematic identification and assessment of effects generated by treatments, programmes, policies, practices, and products.” (Jupp, 2009, p. 104). “At the most elemental level, evaluation research is aimed at determining whether a program was actually carried out. At a more complex level, research is concerned with the effectiveness and/or the economic attributes of a program. Ideally such information should contribute to decisions about whether to expand, curtail, or modify a program.” (Gordon & Morse, 1975, p. 339)
Will there be overall gains in elementary school student achievement (e.g. literacy, math, and science) as measured by the school’s state grade on the College and Career Ready Performance Index (CCRPI) that includes the Georgia Milestones end-of-grade assessment in reading and mathematics?	Comparing 2014 baseline College and Career Readiness Performance Index (CCRPI) scores to 2017 scores with a correlated two-tail t-test (Lowry, 2019).	“The t-test for correlated samples is especially useful in research involving human or animal subjects precisely because it is so very effective in removing the extraneous effects of pre-existing individual differences” (Lowry, 2019).
Will joint projects be mutually beneficial to both partner organizations?	Qualitative evaluation research (Denzin & Lincoln, 2011; Newman, 2011) conducted by internal evaluators looking at the outcomes of the partnership through interview data and discussions.	The conclusions can lead to “a new design and development model” or “an enhanced version of an existing design and development model” (Richey & Klein, 2007, p. 136). Supporting data includes “user perceptions and reports.”
Will the Positive Behavior Interventions and Supports program lead to a significant reduction in discipline incidents reported to the state?	Comparing 2014 (baseline Office Disciplinary Referrals (ODR) scores to 2016 scores with a correlated two-tailed t-test (Lowry, 2019).	

Ethical Approval

Institutional Review Board approval was provided to study the Professional Development School relationship with the district. In this study, only top-level, public data were used so that individual teachers or students could not be identified.

Results and Discussion

The findings can be grouped into four categories that reflect the research questions. These include (1) adhering to essentials guiding the partnership, (2) reading and mathematics literacy support, (3) developing and supporting joint programs, and (4) positive behavior interventions and supports. The narrative also provides information on what occurred as part of the partnership.

Category 1: Adhering to Essentials Guiding the Partnership

Our PDS partnership is guided by the nine required essentials developed by the Executive Council and Board of Directors of the National Association for Professional Development Schools (NAPDS, 2008b). All members of the partnership agreed to this claim.

Essential 1. The first essential is “[a] comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community” (NAPDS, n.d., para 4). Both parties agreed that it was important to the region to improve the education of PreK-12 students. Few local students were competitive in gaining admission to GCSU, given that it is a selective institution in the state system (GCSU, 2016). As the president of the university pointed out in a meeting, “[w]e need to work collaboratively if we are going to change the educational situation in our community” (S. Dorman, personal communication, August 8, 2018). At that time a goal was set to seek funding to establish a center for rural education to assist middle Georgia rural communities in advancing education, especially with economically-challenged communities.

The formal PDS memorandum of understanding between the District and University reflects the comprehensive mission essential and starts out with the following:

Professional Development Schools (PDSs) represent a partnership among schools, universities, and community stakeholders. The Baldwin County School District and Georgia College are committed to becoming a driving force in the community by transforming P-20 education and developing students, educators, and leaders who think critically and design innovative and creative opportunities within a democratic and global society. The mission of the professional development school partnership between BCSD and GCSU is to improve P-20 education for our students, educators, and leaders through collaborative engagement in teaching and learning (Georgia College & State University & The Baldwin County School District, 2015, p. 1).

Essential 2. The second essential is “a school – university culture committed to the preparation of future educators that embraces their active engagement in the school community” (NAPDS, n.d., para 4). The College of Education has a long history of having a strong teacher preparation program. Preservice teachers spend 2-3 days a week in the field as juniors and complete a year-long internship as seniors. The District is a primary place for placing students for active engagement in the classroom (C. Garrett, personal communication, July 30, 2019). Currently, the middle grades program preservice teachers are all placed in the district’s middle school.

Likewise, the special education program is holding class in the district and those students are working in the schools. The early childhood/elementary and secondary programs are also placed in the district whenever possible.

Essential 3. The third essential is an “ongoing and reciprocal professional development for all participants guided by need” (NAPDS, n.d., para 4). Due to the high poverty level of the community, all schools in the District are Title I. In 2015, three of the four elementary schools were considered “Focus Schools” by the State of Georgia due to not reaching minimum achievement levels (Baldwin County School System, 2015). This put literacy professional development for the District teachers as a high priority. It also offered additional professional development opportunities for the preservice teachers assigned to the schools. We continue to support this effort and the scores on the state of Georgia Milestones exam reflect that the effort is working.

Essential 4. The professional development opportunities also met the fourth essential of a “shared commitment to innovative and reflective practice by all participants” (NAPDS, n.d., para 4). This was seen as classroom teachers tried new methods to engage students and provide positive behavioral supports. Likewise, preservice teachers gained valuable insight into ways to manage the complexities of the classroom. Working together, the partners were able to secure state funding for the competitive Literacy for Learning, Living, and Leading (L4GA) grants to cover things like sub pay and formal professional development for teachers.

Essential 5. The fifth essential is for “engagement in and public sharing of the results of deliberate investigations of practice by respective participants” (NAPDS, n.d., para 4). Sharing the partnership outcomes continues to be an ongoing process with presentations at many national and international conferences such as the International Academic Forum, the Hawaii International Conference on Education, National Association of Professional Development Schools, and the International Conference of the Association for Positive Behavior Support. One important outcome of the PBIS initiative was the assistance in the development of the *Georgia Positive Behavior Interventions and Supports (PBIS) strategic plan 2014-2020* (Georgia Department of Education, 2014) and the associated rules that became the first ever PBIS endorsement program for teachers (Georgia Professional Standards Commission, 2019).

Essential 6. The sixth essential is an “articulation agreement developed by the respective participants delineating the roles and responsibilities of all involved” (NAPDS, n.d., para 4). Early in the partnership, stakeholders met on several occasions to develop a comprehensive articulation agreement which is reviewed each year and updated as needed. The roles were outlined as seen below.

- Georgia College Responsibilities:
 - Goal 1: To improve educational opportunities for children enrolled in the school:
 - Provide human resources (teaching candidates) to lower teacher-pupil ratios;
 - Provide focused, differentiated instruction in tutoring and small groups based on teaching candidate assignments;
 - Assist in improving achievement levels;
 - Prepare interns with methods reflecting best practices.
 - Goal 2: To provide both informal and formal professional development for

- Baldwin County teachers and Georgia College teaching candidates:
 - Provide support in school-wide professional learning programs and activities as requested;
 - Facilitate in-classroom demonstrations and assistance as requested;
 - Interact with school faculty in ways that promote professional growth.
- Goal 3: To administer teacher education standards and evaluation associated with certification:
 - Communicate supervision and accreditation standards;
 - Provide efficient procedures for evaluation requirements;
 - Provide direction of intern mentoring and supervision.
- Baldwin Schools Responsibilities:
 - Goal 1: To provide exemplary teacher education opportunities for teaching candidates:
 - Model best practices in all curricular areas;
 - Model differentiated instruction;
 - Model progressive practices (discipline, inclusion, etc.);
 - Mentor interns by supervising and providing feedback to planning and teaching;
 - Provide supervised opportunities to develop independence in teaching;
 - Adhere to standards and requirements associated with certification;
 - Seek opportunities to collaborate with Georgia College faculty for professional learning.
 - Goal 2: To facilitate inquiry and research at the school site in accordance with BCSD policy and Georgia College Institutional Review Board Policies:
 - Assist in obtaining permissions for inquiry and research, in accordance with federal statutes and Baldwin County Schools policies;
 - Facilitate requirements for Institutional Review Board approval;
 - Willingness to engage in inquiry and support teaching candidates' requirements;
 - Provide access to institutional data and assessment/test data for research purposes, as legally permitted (Georgia College & State University & The Baldwin County School District, 2015, pp.1-2).

Essential 7. Built into the articulation agreement is the seventh essential for “a structure that allows all participants a forum for ongoing governance, reflection, and collaboration” (NAPDS, n.d., para 4). The University faculty and administrators, classroom teachers, and school administrators continue to suggest new ways to enhance the partnership and meet on a monthly basis. With the addition of a high school teacher career academy, a new pathway to becoming a teacher is now being explored where the University and District will partner to provide a seamless entry into the teaching profession.

Essential 8. The eighth essential is “work by college/university faculty and P–12 faculty in formal roles across institutional settings” (NAPDS, n.d., para 4). As the partnership developed, the superintendent was awarded faculty status and invited to teach courses for the university. Likewise, District and University faculty, teachers and administrators are involved in shared initiatives and committees.

Essential 9. The ninth essential is “dedicated and shared resources and formal rewards and recognition structures” (NAPDS, n.d., para 4). Teams worked together to identify resources to use in professional development and collaborative research. As it relates to recognition, the District, Superintendent, and teachers have been recognized during award ceremonies at the University and University personnel have been recognized by the District. Based on the nine essentials, there were many collaborative efforts that benefited both entities, and the participants all agreed that the nine essentials were followed.

Category 2: Reading and Mathematics Literacy Support

One of the first collaborative activities that we worked on was to apply for literacy grants to support reading improvement in the District. This was determined by the superintendent and elected board of education to be an essential goal for the incoming administration. Because the District, which serves a total of seven schools, did not have grants management staff, the University’s grants center assisted in all aspects of the preparation and application process to prepare the grant. In 2016, we were awarded the “K-2 Mathematicians and Writers” literacy grant and began implementation of the literacy program within each of the P-12 schools in the District. Supplemental assistance was provided through a University faculty member with expertise in literacy who was reassigned one course per semester to work in the District, which was paid from the grant.

Over the course of the next two years, the PDS partnership continued the “Read Baldwin County” initiative. The designated faculty member continued to work within the District in its implementation and eventually was assigned by the University to work full-time within the District to support literacy and act as the PDS liaison between the partners. An additional literacy faculty member supported the program in the summers.

This arrangement allowed the University to have teacher candidates’ field placements occur in classrooms where literacy professional development and implementation was taking place at the ground level. We could then test the theoretical concepts out with real students in a P-12 field-based settings, which resulted in a three-fold benefit to teacher candidates, the District, and its students. An added benefit to this arrangement was that it allowed the University to offer a Reading Endorsement through state certification within the District.

As new opportunities arose, the partnership expanded its collaborative efforts. The next opportunity was to work on Middle Grades science, technology, engineering, and mathematics (STEM) in a partnership that also included the arts called “STEAM Ahead”, which began in 2017 and has continued through the submission of multiple subsequent grants. This effort allowed the University to provide a faculty member a course reassignment to oversee this STEAM project which provided professional development to the District’s middle grades teachers. We also brought our middle grades teaching candidates to the school for on-site classes and observations.

One thing PDS leaders learned through this process is that many granting agencies look for a strong partnership between PDS entities when making funding decisions. The strength of the continuing partnership between our two entities has played a role in the partnership’s ability to continue to obtain grant funding. Overall, there was a significant improvement in the District’s College and Career Readiness Performance Index (CCRPI) scores when comparing schools from the 2014 baseline to 2017 (see Tables 4 & 5). The CCRPI score reflects content mastery and include achievement scores in English language arts, mathematics, science, and social studies based on student performance on the statewide Milestones assessments (Georgia

Department of Education, 2019). Although the results are not significant, there is a positive gain. Note that the 2018 data cannot be used in any comparisons. The state of Georgia has redone the CCRPI algorithm which prevents direct comparisons from previous years (see: <https://www.gadoe.org/CCRPI/Pages/default.aspx>).

Table 4: College and Career Readiness Performance Index (CCRPI) data

	2014 CCRPI	2017 CCCRPI
BH Elementary	71	69
CS Elementary	71	73
ER Elementary	55	61
MW Elementary	52	56
OH Middle School	59	60
BH High School	66	76
Note: Numbers are rounded off; Data source: http://ccrpi.gadoe.org		

Table 5: County-wide College and Career Readiness Performance Index (CCRPI) comparison: 2014 to 2017

Mean ^a -Mean ^b	t	df	P (one-tailed)
-3.5	-2.05	5	0.04
Note: Data includes all four elementary-level schools, one middle school, and the one high school. 2014 serves as the baseline and is compared to 2017. Note that in 2018 CCRPI rubrics were changed and cannot be compared to previous years.			

Category 3: Developing and Supporting Joint Programs

Four programs that are based on the independence and interdependence of the professional development school partnership are the Early College program, the Montessori Academy, and a community butterfly house and garden and the newly-established educational doctorate.

The partnership between the District and University includes an Early College program located on a university campus (see: <https://www.gcsu.edu/earlycollege>). This program, which serves approximately 300 primarily first generation and at-risk middle and high school students, allows participants to complete their daily Georgia middle and high school education requirements at the University. High school student participants are allowed to dually enroll at the University to attend college courses. The Early College Program benefits College of Education teacher candidates, as well, in that it enables them the opportunity to have field placement in the same location as their education courses, which is important for students without transportation. The program consistently achieves 100% college placement of high school seniors.

Another recent example of collaboration between the partners is the creation of a Montessori Academy at the District's Early Learning Center (see: <https://montessorielc.com/>). The Academy serves children aged 6 weeks to Kindergarten, and provides parents access to the Montessori delivery model. Employees of the Academy are certified teachers and trained in Montessori. District and University employees have priority in enrolling their children and, once they are all enrolled, all additional seats are open to students from the community.

A third emerging program involves the District, University and Milledgeville Rotary Club. The Club will provide funding and volunteer support for a butterfly house and community garden. The partnership of the Dean of Education and Superintendent, both Rotary Board members,

demonstrated that there is a strong partnership which showed the Rotary it was an initiative worth making the investment.

A fourth program that supports the PDS relationship is the new educational doctorate that supports leaders in the District. Two District principals are already enrolled with more applying to enter subsequent cohorts. The doctorate was formed to help support current and emerging leaders in the District so they would not need to drive hours away for a program.

Category 4: Positive Behavior Interventions and Supports

Another important component of the partnership involves collaboration in the area of Positive Behavior Interventions and Supports (PBIS). Through the partnership's monthly meetings, assistance with district-wide behavior management was identified as a need in the District and also a need for teacher candidates so that they could observe, develop, and implement positive behavior management approaches. Because PBIS is a statewide initiative in Georgia, the District applied to become a PBIS district. After introducing school District representatives to the staff of the Georgia DOE's PBIS team, the DOE's team agreed to assist the District. The resulting student behavior support process began during Spring Semester 2015, when the University assigned a professor with an extensive background as a practitioner in behavior support to work with the District as a professor-in-residence in its efforts to address behavior management.

The behavior support process adopted by the PDS partnership was multifaceted, including components of establishing, training, and supporting the use of PBIS as the District's framework for managing student behavior. In tandem with this effort, the partnership established a district-level behavior support program and related processes, contributions to a partial reconfiguring of the existing student code of conduct, and behavior management support program for teachers whose classroom management practices caused administrators concern. In order to supplement the District's new proactive approach, the superintendent hired the District's first behavior specialist, a former social worker with experience in counseling youth in a local mental health setting. The professor-in-residence met extensively with the new behavior specialist.

Next, the superintendent requested that the professor-in-residence conduct initial introductory training sessions pertaining to PBIS and proactive behavior management prior to the advent of District implementation on the first day of the fall term in 2015. During the summer of 2015 the professor-in-residence planned and conducted professional development training sessions in PBIS for District administrators, school-based PBIS leadership teams, existing teachers, and new teachers alongside the District's superintendent and PBIS coordinator.

The Office Disciplinary Referral (ODR) data tracked throughout the initial year of implementation reflected an immediate and substantial decline in district-wide office referrals and a decrease in the District's suspension rates across each of its seven schools. According to Georgia Department of Education data, referrals were greatly reduced (see tables 6 & 7). This trend largely continued throughout the following two school years among each of the District's elementary schools with progress fluctuating somewhat at the middle and high school levels.

Table 6: District-wide office disciplinary referral data (2014 to 2016)

School	2014 Referrals	2016 Referrals
BH Elementary	270	153
CS Elementary	249	374
ER Elementary	734	578
MW Elementary	367	230
OH Middle School	1508	1193
BH High School	2748	1420
Total	5876	3948
Mean	979	658
Note: Data includes referrals from all six schools in the District. 2017 and beyond could not be compared due to systematic changes in the data collection; Data source: https://www.gadoe.org/schoolsafetyclimate/Pages/Student-Discipline.aspx		

Table 7: District-wide office disciplinary referral comparison (2014 to 2016)

Mean ^a -Mean ^b	t	df	P (one-tailed)
321	+1.53	5	0.09
Note: data includes referrals from all six schools in the District. 2017 and beyond could not be compared due to systematic changes in the data collection.			

PBIS challenges. Challenges are expected with the implementation of any PDS initiative, and this partnership was no exception. Initial challenges reported by the professor-in-residence included procuring entrée into schools and the cooperation of schools' administration and faculty. However, once the superintendent articulated her backing and support of the professor as an equal partner in PBIS implementation, cooperation among staff increased dramatically, and the resulting relationships flourished throughout the extent of the faculty member's involvement with the District. As an example, at the beginning of the professor's involvement in Fall 2015 an elementary principal was unresponsive to requests to hang student-friendly PBIS matrix posters in key locations throughout the building (a common component of PBIS implementation), arguing that the posters would damage wall paint. The superintendent spoke privately with the principal, helping him to understand that she backed all PBIS-related suggestions and expected him to work with the professor as her designee in the initiative. From that moment forward, the principal became an active partner-and ultimately an advocate-of PBIS-related practices such as this one.

Another challenge to the behavior support component of the PDS partnership was one not atypical in many such cooperative efforts-mission creep. The professor-in-residence, who had served as an investigator into allegations of discrimination in his previous P-12 directorship, was asked to conduct a time-consuming formal Human Resources investigation into allegations that one of the District's administrators had discriminated against a student with disabilities. Though the faculty member was willing and able to conduct the investigation, the investigative process proved to be extensive and detracted somewhat from the time he was able to devote to monitoring district-wide PBIS implementation.

Limitations of the Study

The primary limitation of the study is that there can be confounding variables such as changes in the administration and teaching staff, other state, district, and school-wide initiatives, and

community influences. These are often hard to eliminate from something like the CCRPI, which is an overall score for an entire school.

Recommendations for Further Research

The researchers feel that it is important to go beyond the administrators and key personnel looking at the program's success and interview individual teachers to see how they see the partnership. This may lead to new ways to collaborate in the future. In light of the many professional development schools that were not able to sustain the relationship, we need to continue to explore ways to keep our program strong (Dresden, Blankenship, Capuozzo, Nealy, & Tavernier, 2016).

Because PDS partnerships vary greatly depending upon the contexts and dynamics involved between participating partners, the authors are hesitant to generalize beyond the present context. Consistent with the concept of reader generalizability, the reader might best be able to determine whether our experiences are relevant to their own individual contexts.

In summary, the partnership is an overall success. Literacy continues to improve and behavioral incidents continue to decline. Early College and the Montessori Academy are both doing well. Both parties agree that it is important to continue the relationship.

Conclusion

Our PDS model exemplifies how the joint PDS mission has reached beyond each institution's ability to provide the experiences and services in isolation. For example, when the Early College program required space for P-12 students at the University's campus while, in converse, the joint Montessori Academy needed space for its pre-kindergarten children within the District's Early Learning Center. The interdependence in the PDS allows the partners to accomplish the overarching joint mission to improve education at all levels in our community from six weeks old to the doctoral level. The University provides grant assistance, professional development, and courses to K-12 teachers, while the District opens its classrooms for field observation and practice with the University's teacher candidates.

Since 2015, the Professional Development School partnership between the university and the school district exemplifies the PDS guiding essentials of achieving "a comprehensive mission that is broader in its outreach and scope than the mission of any partner and that furthers the education profession and its responsibility to advance equity within schools and, by potential extension, the broader community" (National Association of Professional Development Schools, 2008b). Though the evolution of the partnership, expected challenges have given way to a multi-faceted and highly effective delivery of services that have benefited both the University and the District in a profound way.

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Acronyms

AACTE: American Association of Colleges for Teacher Education

COE: College of Education

CCRPI: College and Career Readiness Performance Index

DOE or GaDOE: Georgia Department of Education

GCSU: Georgia College & State University

MOU: Memorandum of Understanding

NAPDS: National Association for Professional Development Schools

ODR: Office Disciplinary Referral

PBIS: Positive Behavior Interventions and Supports

PDS: Professional Development School

SW-PBIS: School-wide Positive Behavioral Interventions and Supports

STEM: Science, Technology, Engineering, and Mathematics

STEAM: Science, Technology, Engineering, Arts, and Mathematics